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Practical Application of Assessment Theories for English Teacher through Digital Technologies

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Abstract. Digital technology has revolutionized educational quality, particularly in English as a Foreign Language (EFL) classrooms. This article examines the benefits and challenges of using web-based applications such as Kahoot, Quizizz, Google Apps, and Nearpod for assessments. These tools offer innovative alternatives to traditional methods by enabling dynamic evaluation of student progress, providing real-time feedback, and creating engaging learning experiences. However, challenges such as internet connectivity issues, technological proficiency gaps, and the need for adequate devices can hinder their effectiveness. This paper provides guidelines for optimizing digital assessments, including assessing students' proficiency levels, setting realistic deadlines, ensuring equitable access to technology, and selecting appropriate platforms. The methodology comprises a thorough review and analysis of existing literature on digital tools in EFL classrooms, emphasizing the benefits and challenges of web-based assessment applications. By following these guidelines, educators can design assessments that are valid, reliable, fair, and transparent, thus enhancing teaching strategies and student outcomes. The article also highlights the importance of understanding various assessment types—initial, formative, and summative—and tailoring digital tools to meet specific EFL education objectives. By leveraging digital technologies, educators can improve the assessment process, ultimately contributing to a more effective and successful teaching and learning experience.

Keywords: Digital assessment; EFL classrooms; web-based applications, educational technology.

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Introduction

The Technology has vastly developed and improved the quality of life, including education. Various digital technologies have been introduced and employed to assist the teaching and learning process, transforming the classroom flow and changing the character of educators and students. Nowadays, thousands of classroom activities can be run with digital technologies, including assessing students' performance to achieve success in the teaching and learning process. The presence of educational technology eases educators in organizing the assessment process. Digital technology development offers creative and innovative ways to gather information on students' growth and measure their progress from the beginning to the end of the learning process (Hodges et al., 2014). Aside from educators who benefit from the implementation, students earned the advantages as the quality improvement of the assessment procedure will affect the next strategies that will be used for better teaching and learning activities (Koomen & Zoanetti, 2018), which also create a more engaging learning experience with the expected outstanding learning outcome.

This revolution in assessment arose as paper-based or standardized tests such as the Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS), SAT Subject Test in English, and Cambridge English exams which were mostly implemented in the traditional model of assessment, tend to need more comprehensiveness in assessing, especially when it came to capturing students' progress and process of learning. This idea is also supported by Gonski et al. (2018), who claimed that educators should maximize the benefits of technological tools to create effective and efficient teaching and learning processes. Therefore, leading applications such as Kahoot, Quizizz, GoogleApps, Edpuzzle, Nearpod, and Socrative, as well as ample helpful and insightful digital technology, were created to employ educators in assessing students' performance to be more comprehensive in numerous disciplines, including English.

As a language that is widely used to communicate internationally, English is learned by a large number of people around the world, including Indonesians. Since Indonesia has its official national language and daily communication with its mother tongue, English is a foreign language known as EFL in Indonesia. This language is usually learned in school, and one of the important subjects which the score and the skill affect so many aspects of student's live, including when they go to the university or jump to the working life; therefore, the assessment during teaching and learning process of English is essential. It influences the success of students' comprehension and the skills they master.

In this century, it is common to adopt web-based applications for education, especially in EFL classrooms, since they emphasize and already propose 21st-century learning concepts. However, the benefits of technological tools to support the educational field specifically for assessment also came with hurdles and challenges in its implementation (Archer et al., 2023). Even though the catastrophe of COVID-19 has increased the utilization of digital technologies, the success of the implementation is not merely determined by the number of its employees but by how practical application used for the assessment process can benefit teachers and students beyond the score and outside of the classroom. Therefore, maximizing the valuable aspect and minimizing the defiance of ICT tools for assessment needs

the best guidelines, especially in teaching English as a foreign language, as it happens in Indonesia.

Before designing an assessment, it is important to comprehend its basic purpose. Earl (2003) divided it into three objectives. 1. Assessment for Learning is a process used by the teacher as she or he investigates and assesses students' progress to collect information about students' knowledge and skills and then provides feedback and guidance to improve them. 2. Assessment as Learning involves students monitoring their learning progress and employing self-assessment and teacher feedback to work with their understanding and reflect on their Learning and goals. 3. Assessment of Learning is when the teacher utilizes the assessment product and evidence to judge students' achievement to measure their competence. It is used to track their learning journey and create future learning concepts.

Aside from its specific purposes, the main role of assessment is to collect information. Anjudar et al. (2020) argued that the information on students' development gathered through assessment will create a better teaching model and program, thus improving students' learning experience and outcomes. To reach the optimum process in assessing students, digital technologies provide interactive features that allow teachers to creatively utilize them to the fullest, which accompanies various assessments. Khairil and Mokshein (2018) discussed the top three types of assessments typically implemented in EFL classrooms. The first is the initial or diagnostic assessment, which is used to gauge students' comprehension before the teaching and learning process begins. This assessment provides valuable information for teachers, enabling them to design appropriate teaching strategies, models, and activities that cater to students' needs, knowledge, and competencies. The second type is formative assessment, which involves the teacher continuously monitoring students throughout the learning process. This includes providing ongoing feedback to ensure that students are on the right path to achieving each learning objective. Finally, summative assessment occurs at the end of the teaching and learning process. During this assessment, the teacher collects data on how much and how deeply students have understood the material covered. Web-based applications are specifically designed to support these assessments, addressing the unique needs of each type.

After knowing the purpose of assessment, it is also essential to comprehend factors that categorize a good assessment. Therefore, to consider whether the assessment is appropriate to be implemented, there are seven factors to contemplate in designing an assessment (Fitriyah & Jannah, 2021): (1) Validity, which points to the relevance of the assessment measurements and students' performance being measured. (2) Reliability highlights the stability and consistency of the assessment tool when it is used and implemented. (3) Fairness and Equity emphasize that all students have similar backgrounds, settings, and other supporting devices that show their compatibility. (4) Authenticity in assessment means that the assessment is realistic and matches the skills and students' abilities that need to be assessed. (5) Practicality that spotted the relevance of the assessment method and the whole learning objectives. (6) Sufficiency means that the quantity and quality of assessment are adequate and credible by providing evidence. (7) Transparency in assessment means that every

stakeholder should be able to access clear and accurate information about the task and the procedure assessment.

As the purpose of assessment is already clear, it is essential to create an assessment procedure that teachers need to construct and determine the best digital tools for its implementation to develop the finest assessment process that fits the learning objectives. Therefore, based on the problem comprehensively elaborated, this article provides information on benefits and challenges in the practical application of assessment as well as strategies and guidance for English teachers in designing the assessment process, including making a suitable portfolio with the assistance of digital technologies in EFL classroom as well as create a worthy learning model.

Method

This study explores the practical application of assessment theories for English teachers using digital technologies. The methodology involves a comprehensive review and analysis of existing literature on the use of digital tools in EFL (English as a Foreign Language) classrooms by using Systematic Literature Review (Petticrew & Roberts, 2006).. The primary focus is on identifying the benefits and challenges associated with web-based assessment applications like Kahoot, Quizizz, Google Apps, and Nearpod. The study examines the theoretical underpinnings of assessment, categorized into Assessment for Learning, Assessment as Learning, and Assessment of Learning, and evaluates how digital tools can support these assessment types. The paper outlines seven key factors that determine the quality of assessments: validity, reliability, fairness and equity, authenticity, practicality, sufficiency, and transparency. These factors guide the development of effective assessment models and the selection of appropriate digital tools. Practical guidelines for implementing digital assessments are provided, based on an analysis of factors such as students' proficiency levels, the importance of setting realistic deadlines, ensuring equitable access to technology, and choosing suitable platforms (Asrial et al., 2022). The study highlights the need for teachers to develop their technology, pedagogy, and content knowledge (TPACK) to effectively integrate digital tools into the assessment process. By synthesizing the theoretical and practical aspects of digital assessment, this paper aims to provide English teachers with a framework for enhancing the assessment process and improving student outcomes through the strategic use of digital technologies.

Findings and Discussion

Ghaicha (2016) argued that the ‘Assessment of Learning’ is the leading idea that creates the assessment theories. In the implementation, it is important to match the type of assessment the teacher wants to run, determine what assessment model should be constructed, and match it with web-based applications that could support the ideas. However, it is important to explore the benefits and hurdles in the practical application of assessment itself with digital technology tools.

The benefits and challenges in the practical application of assessment in digital technologies:

Flexible yet Vulnerable to Internet Connection

As we know, implementing assessment with the help of a web-based application is easy and handy. It is accessible on the platform at anytime and anywhere. Furthermore, the algorithms allowed users to automatically get the result and calculate the score, which makes the grading process easier. In addition, the organization process becomes more convenient as it is stored online. Spivey and McMillan (2014) support this statement by claiming that online assessment allows teachers to effectively implement assessment processes, safely organize them, and complete the grading process perfectly.

Moreover, as it is automatically saved in the database, it lets teachers review and re-check the students' work to accurately examine their knowledge and comprehension. However, this easiness also came with hurdles. As it is conducted online, the number one and most reported leading issue of implementing web-based applications in education, including the assessment of internet connections. No matter how incredible the platform is, the assessment process will be hindered if the users cannot maintain a stable internet connection. This issue is the most reported one as internet connection cannot be controlled or predicted. Even in the big city, which logically provides a better connection than in rural areas, other related problems such as weather and technical problems contribute to the uncertainty of internet connection.

McKinley and Thompson (2018) also promote this issue by claiming that the instability of internet connection becomes the weakest point of the implementation of online assessment. The internet connection problem also affects assessment factors such as validity and fairness. When students do not undergo the assessment process similarly and face different situations when working on their assessment online, the assessment result lacks credibility. Thus, internet connection became one of the challenges in the practical application of assessment in digital technologies.

Time Efficiency but The Gap in The Competency

Employing a web-based application is very useful and saves much time, especially when applying it to assess student skills, knowledge, and competency. As it can be conducted simultaneously in different places or on the same platform at various times and places, assessment with digital technology tools is efficient and improves class organization. Galikyan et al. (2018) argued that web-based applications save time and make the assessment process timely. By all students to produce work and assess the amount of time that is already scheduled to meet the situation and condition of both students and teacher, doing an online assessment with a web-based application allows to maximize the time and manage it wisely and still adjust it with some variable that influences the assessment process without degrading the credibility of the assessment.

However, it also came with another hurdle. It usually comes from the teacher; sometimes, only some students experience it, which is called the gap in the utilization competency. As we know, not all teachers comprehend and can employ technological tools (Jalilzadeh & Coombe, 2023). This factor often becomes the biggest problem when implementing digital technologies equally in all classrooms. Not all teachers who handle the class have proper and enough competency in employing online portals for classroom activities included in the assessment process. Most of the teachers who face this problem are the senior ones

who cannot catch up to the alterations of the modern generation and changes in the technological tools for education.

Sa'diyah et al (2022) also argued that the difference in competency in utilizing the Internet for education becomes the challenge in applying digital technologies. When the teacher needs help organizing the proper assessment model or even the students cannot understand the utilization or the adequate instruction in assessing digital technologies such as apps, websites, or platforms, the credibility of the assessment results will be affected. Therefore, students and teachers of various ages should be able to use the platform so the assessment process is accountable properly.

Improvement in Technological Skills but Need More Supporting Devices

As students and teachers frequently engage in platforms and websites of digital technologies, it consciously encourages their skills in employing them. Since the assessment process is conducted online and utilizes web-based applications and educational portals to support the assessment model, students and teachers' comprehension and skill in engaging with educational online assistance will increase as they get used to the features. This argument also supported by Altunay (2019), who claimed that repeatedly utilizing digital technology tools and platforms allowed students and teacher to improve their capabilities, which affected their technological skills to be better.

However, even though their intensity in employing digital technologies will benefit both the student and the teacher, supporting devices are also crucial in the implementation process. When great supporting devices do not accompany them, the assessment process will not run well, and the idea of improving their technological skill will also vanish. Hamad (2017) highlighted that the different devices possessed by each student and the teacher who leads the classroom and creates the teaching model will affect the success of its implementation, including the assessment process. Hence, the explanation pointed out that no matter how promising the platforms and websites are and how eager students and teachers are to implement the assessment process through digital technologies, the practical application of assessment would only go well with decent devices.

The benefits and challenges in the practical application of assessment in digital technologies explained above enlighten the importance of supporting aspects in the success and effectiveness of implementing online assessment in the classroom, especially for EFL students. Therefore, to come up with a solution for the implementation, here are some guidelines that could be used to create the best practical assessment application with the help of digital technology tools.

Guideline in Conducting Assessment with Digital Technologies Tools for EFL students:

1. **Determine the Proficiency Level of the Students**

It is important to know what type of students will take the assessment. This will help the teacher, the website designer, and the pupils understand the instructions so they can be followed effectively. In English, six levels of language proficiency are constructed by the Common European Framework of Reference for Languages, mostly known as CEFR. They grouped the level into three broader levels, which are A1-A2 (Basic User), B1- B2 (Independent User) and C1-C2 (Proficient User). (1) A1 Beginner who only uses simple phrases for basic needs

and uses approximately 700 vocabularies. (2) A2 Pre-Intermediate who knows around 1500 words and uses English for everyday activities. (3) B1 Intermediate who knows 2500 vocabulary words and can have simple conversations about topics they are familiar with. (4) B1 Upper-intermediate who can communicate about various topics, have around 4000. (5) C1 Advance with 8000 vocabularies and can express themselves fluently. (6) C2 Mastery, which speaks with complete mastery. Knowing what levels their students are at helps them develop assessment models and choose suitable online Apps and platforms that meet the needs of pupils. For instance, students with A1 to A2 levels might be suitable for gamification platforms that provide interactive features and are also handy.

Meanwhile, B1 to B2 level students can use more complex platforms and focus on the intended activities for improving their English skills, such as Flipgrid for speaking. On the other hand, students in C1 to C2 level can take advanced Apps that might usually not be intended for education purposes but can be creatively employed for their English assessment, such as constructing argumentative text about current issues in Twitter to check their writing proficiency. Therefore, it is essential to comprehensively know the student's proficiency level in English, not only for the core information in developing the assessment model but also for choosing the suitable digital technologies application for implementation.

2. Giving the Time Deadline to Consider the Unexpected Problem

One significant aspect that plenty of teachers might miss is the calculation and consideration of how long the assessment process might take. In contemplating adapting an online platform for the assessment process, the teacher has to estimate the possibility of unexpected problems interfering with the assessment process, such as an internet connection or electricity problems, especially when the student lives in rural areas. This aspect is crucial for students to prepare and adjust any variables affecting the assessment process (Zhang et al., 2023; Laskar, 2023). Nevertheless, sadly, most teachers ignore this aspect and arrogantly argue that this problem is invalid and is merely an excuse that students make up. It is a real problem that is regularly faced by many students, particularly in Indonesia. Hence, to avoid this, it will be a good decision to set a period for students to complete the assessment process. The deadline will help students manage their time and organize their schedule so they are expected to work with the assessment in the best situation and condition; thus, the accountability of the evaluation will be fulfilled.

3. Consider Students′ Supporting Devices

As explained in the previous paragraph, the differences in supporting devices will affect the assessment process, specifically when conducted online (Sherkuziyeva et al., 2023). The devices employed affect the performance of students and the way teachers assess them. As the device is not supportive enough to promote learning, the credibility of the assessment is also questioned because there is a huge possibility that the devices hinder students' performance and obstruct the objective of the assessment process. Therefore, teachers can investigate what type of devices students possess or check whether the school provides a perfect quantity and quality for online evaluations. Since fairness is important in assessment, the teacher has to ensure that every student has the same condition of devices that could support their evaluation with a digital technology tool. If the teacher finds that one of the students cannot meet the standard, it will

be a wise call to change the assessment model or might help them by providing the device.

4. Choose the Best Platform for All Aspect

After following all the guidelines, the last step teachers need to consider is selecting suitable Apps that meet all the previously elaborated aspects. Every web-based application, platform, and website has customized features and objectives when developing the technologies; thus, teachers must ascertain what skills or competencies need to be assessed, what level of proficiency the students have, and what type of devices are provided. In applying this session, teachers must perform their technology, pedagogy, and content knowledge. The knowledge will help teachers determine the best technological tools for specific aspects needing assessment (Sofyan et al., 2023). Therefore, as teachers analyse that aspect, they can find suitable platforms for the assessment process. Therefore, as teachers are analysing that aspect, teachers can find suitable platforms for the assessment process.

Since the guideline has given a streamline that teachers could follow in creating an assessment model, it is also significant to ensure what assessment model is applicable for each type of assessment and what the best digital technologies could assist the assessment process. Therefore, here are the insights that could be adapted by teachers for assessing students' comprehension, skills, and competency in English, especially for EFL students:

a. Initial/Diagnostic Assessment. This type of assessment is conducted before the teaching and learning process to gain information on how far students comprehend and skill the topic. The teacher can employ multiple-choice or essay models using Kahoot, MyQuiz, Fyrebox, Mercer Metti, or Mentimeter. In addition, if the teacher expects to check students' English mastery before jumping to activities to improve, the teacher can use Padlet to assess students' speaking and writing skills and utilize Wattpad for reading and Spotify for listening.
b. Formative Assessment. In this type of assessment, the teacher needs to monitor students' progress throughout the teaching-learning process and provide feedback so that it will be used to create better teaching strategies and models and employed by students to improve their learning. In engaging this assessment, teachers can work with Google Classroom as it provides everything teachers and students need to supervise the teaching and learning progress. The portfolio and product are also automatically stored in G-Drive, which neatly organizes them and makes it easier to review and re-check wherever and whenever. For specifically writing skills, teachers can ask students to use Google Docs, as it allows intended users to view the history of students' writing progress, how many times they edit and update their text, and at which point and when they change the paragraph. It also enables teachers to leave comments, notes, and some videos that could be used for additional references. By employing those digital technologies, the formative assessment will be run effectively.
c. Summative Assessment. This assessment happens at the end of the teaching and learning process, as the judging process determines how deep the pupils' comprehension is and how far they have mastered the skills. This assessment emphasizes the scoring and grading process more than two other types of

evaluation because summative assessment needs to gather information on the success of the teaching and learning process and discover the level of students' proficiency. Therefore, teachers can employ platforms that instantly and transparently show students' scores, such as Quizizz and Google Forms. Furthermore, teachers can also ask students to create a project to improve their English skills, such as speaking uploaded on YouTube or uploading their writing project to one link of Grammarly that instantly checks pupils' writing proficiency and plagiarism.

Conclusion

The implementation of digital technology in assessments offers significant benefits and challenges in English as a Foreign Language (EFL) classrooms. Web-based applications like Kahoot, Quizizz, Google Apps, and Nearpod provide flexibility, time efficiency, and the ability to enhance technological skills. They offer innovative assessment methods, real-time feedback, and convenient organization. However, challenges such as internet connectivity issues, technological competency gaps, and the need for adequate devices can hinder their effectiveness. To optimize digital assessments, educators should consider students' proficiency levels, set realistic deadlines, ensure equitable access to technology, and choose appropriate platforms. It's crucial to understand and address these challenges to maintain the credibility, fairness, and validity of assessments. By leveraging suitable digital tools, educators can improve the assessment process and enhance the overall teaching and learning experience in EFL education.

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